HELPFUL HINTS

A JAMMED SHUTTLE

The stitch forming mechanism occasionally becomes clogged with loose threads and lint. This will interfere with the efficient operation of the machine. This situation can easily be remedied by removal and cleaning of the shuttle assembly. Cleaning and removal of the lint will safeguard the performance of the machine. To remove the shuttle assembly proceed as follows:

1. Turn the balance wheel until the needle reaches its highest position. The shuttle will assume the position illustrated in Fig. 52.
2. Remove bobbin case as described in "Removing Bobbin Case and Bobbin" (see Page 4).
3. Press down on the two spring loaded shuttle race cover clamps, (C) Fig. 52, and remove the shuttle race cover (B) and shuttle body (A).
4. Clean the shuttle race as well as the shuttle body and shuttle race cover by removing all threads, lint, etc.

When the cleaning has been completed, proceed as follows to replace the shuttle assembly:

1. Turn the balance wheel until the needle reaches its highest position.
2. Place shuttle body, (A) Fig. 52, on pin of shuttle driver and adjust into position.

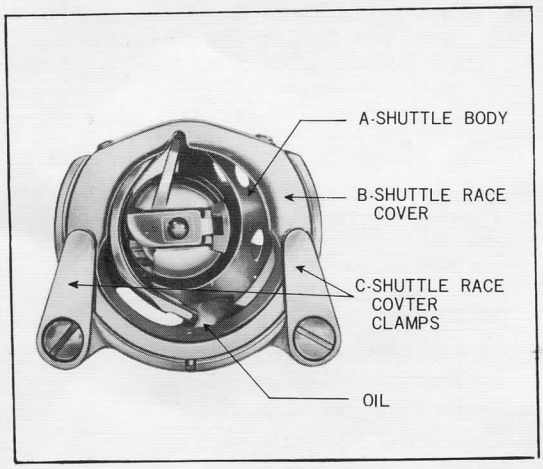

Fig. 52

3. Replace shuttle race cover (B) and lock into position with shuttle race cover clamps (C), making certain the clamps have been snapped securely into position.
4. Put bobbin into bobbin case, see Chapter "Threading the Bobbin Case," page 5.

MACHINE RUNS HEAVILY

The use of inferior oil is often the cause of the machine working heavily or it may be caused by other reasons as follows:

A. Motor belt too tight or has jumped off pulley or hand wheel.
B. Bobbin winder not released, running while sewing.
C. Thread caught in shuttle race.
D. Machine lubricated with unsuitable, gummy oil. Pour a few drops of kerosene into each oil hole and run machine for a few minutes. Then lubricate with proper sewing machine oil.

MACHINE MAKES LOOSE STITCHES —LOOPS ON UNDERSIDE OF MATERIAL

This may be caused by:

A. Machine not threaded properly.
B. Presser foot not down completely.
C. Insufficient tension on needle thread.
D. Thread check spring, (E) Fig. 50, bent or broken.
E. You may have POOR STITCHES AND BAD LOOKING SEAMS FOR the following reasons:
   a. Improper needle for size of thread, see page 7.
   b. Thread wound unevenly on bobbin.
   c. Upper thread tension too tight or too loose.
   d. Bobbin thread too coarse. Should be same as needle thread.
   e. Needle thread too coarse for material.
   f. Needle not suited for material.
   g. Needle point damaged.

UNEVEN THREAD TENSION may be caused by poor quality thread.